

Docket No.: 1095.1306

**REMARKS**

In accordance with the foregoing, claims 1, 5, 21 and 23 are amended. No new matter is presented, and approval and entry of the amended claims are respectfully requested.

Claims 1, 3, 5, 7, 9-12, and 21-24 are pending and under consideration. Reconsideration is respectfully requested.

**Claim Amendments**

Independent claim 1 is amended herein to recite a device including "... wherein an order of the daisy chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light, thereby number of time that each of the plurality of signal lights in the WDM light pass through the plurality of optical filters differs." Independent claims 5, 21, and 23 are amended herein in a similar fashion.

No new matter is presented, and approval and entry of the amended claims are respectfully requested

**Items 3-5: Rejection of Claims under 35 U.S.C. §103(a)**

In item 3 of the Office Action, the Examiner rejects claim 21 under 35 U.S.C. 103(a) as being unpatentable over Tamura et al. (EP0 153 722 A2) in view of Persson (U.S. Patent 6,519,384 B2).

In item 4 of the Office Action, the Examiner rejects claims 1, 3 and 22 under 35 U.S.C. 103(a) as being unpatentable over Tamura et al. and Persson and further in view of Nielsen et al. (U.S. Patent 6,559,988 B1).

In item 5 of the Office Action the Examiner rejects claims 5, 7, 9-12 and 23-24 under 35 U.S.C. 103(a) as being unpatentable over Tamura et al., Persson and Nielsen et al. as applied to claims 1, 3 and 22 above, and further in view of Persson et al. (U.S. Patent 7,110,673 B2).

The rejections are traversed. Applicants submit that features recited by each of the independent claims (and respective dependent claims) are not taught by an *arguendo* combination of the art relied on by the Examiner.

Independent claim 1, for example, recites an optical transmission device including "a WDM port as a port for transmission and reception of a wavelength-multiplexed signal; and a wavelength multiplex/demultiplex unit, the wavelength multiplex unit including a plurality of optical filters that are provided in correspondence with a plurality of wavelengths, are daisy-chain connected, and have a loss characteristic weighted at the plurality of wavelengths in correspondence with a wavelength-dependent loss characteristic, and each of the plurality of

Docket No.: 1095.1306

optical filters has a function of a band-pass filter and a same insertion loss, wherein an order of the daisy chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light, thereby number of time that each of the plurality of signal lights in the WDM light pass through the plurality of optical filters differs." (Emphasis added).

Independent claims 5, 21, and 23 have similar recitations.

That is, according to an exemplary embodiment of the present invention an order of channel connection of optical filters for Add/Drop of channels can be determined with taking a transmission loss of every wavelength into consideration so as to equalize wavelength characteristics.

See, for example, FIGs. 5, 7, and 8 illustrating an example of an optimal arrangement where channels 1, 2, 3, and 4 and channels 8, 7, 6, and 5 are connected in this order, which means that channel 8 is selected after channel 4. See, for example, Figs. 6 and 9, illustrating taking the loss characteristics shown in FIG. 6 into consideration, the channels with channel numbers corresponding to wavelengths are arranged as shown in the system of FIG. 9.

According to an exemplary embodiment, compensating for losses in different channels in transmission using a wide range of wavelength, which a CWDM performs, for example, and to realizing transmission over 100km without repeaters.

By contrast, to meet the need to reduce losses in different channels, Persson, for example, teaches merely arrangement of a multiplexer and demultiplexer as illustrated, for example in FIG. 2.

Thus, Applicants submit that Persson does not teach an order of channel connection as recited by each of the independent claims.

By contrast, Nielsen merely teaches an equalizing insertion losses among the ports. However, Nielsen merely teaches consideration of an order of optical filters a signal passes through in order to minimize an increase in channel losses incurred through the FBGs.

Further, as recited by claim 1, signal lights pass through different numbers of daisy-chain connected optical fibers. By contrast, Persson does not change the number of reflections of each wavelength.

Applicants submit that nothing in the teaching of the other art of record, alone or in an arguendo combination overcomes the deficiencies discussed above.

Thus, the rejections of the independent claims 1, 5, 21, and 23 should be withdrawn.

Dependent claims 3, 7, 9-12, 22 and 24 inherit the patentable recitations of their

Docket No.: 1095.1306

respective base claims, and therefore, patentably distinguish over the cited art for at least the reason discussed above.

**Conclusion**

Since features recited by independent claims 1, 5, 21, and 23 (and dependent claims 3, 7, 9-12, 22 and 24) are not taught by even an *arguendo* combination of the art relied on by the Examiner, the rejection should be withdrawn and claims 1, 3, 5, 7, 9-12, and 21-24 allowed.

**Conclusion**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

May 26, 2009

By:

Paul W. Bobowiec  
Paul W. Bobowiec  
Registration No. 31,024

1201 New York Ave, N.W., 7th Floor  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501

**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this correspondence is being transmitted via facsimile to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450  
on 5/26, 2009

STAAS &amp; HALSEY

By: Paul W. BobowiecDate: 5/26/09